**SOIL MANAGEMENT ENHANCEMENT (CSP Enhancements)** **October 2005**

**Colorado Enhancement Activity Job Sheet S-1**

**Name:**

**Soil Conditioning Index (SCI)**

Payment as follows:

> $ 3.48 / Acre / Year for each 0.3 increase in the SCI starting from an SCI of 0.1 at $ 2.32 acre / year

The Soil Conditioning Index (SCI) is a tool that can predict the consequences of cropping systems and tillage practices on the trend of soil organic matter.  Organic matter is a primary indicator of soil quality and an important factor in carbon sequestration and global climate change.

The SCI has three main components:

> 1) the amount of organic material returned to or removed from the soil;
> 2) the effects of tillage and field operations on organic matter decomposition; and
> 3) the effect of predicted soil erosion associated with the management system.

The SCI gives an overall rating based on these components. If the rating is a negative value, the system is predicted to have declining soil organic matter.  If the rating is a positive value, the system is predicted to have increasing soil organic matter.

The SCI is a quick way to characterize the organic matter dynamics of a farming system. Organic matter is a critical component of soil function for several reasons. Surface residue protects soil from the impact of rain and wind.  As residue decays, it feeds microbes that improve soil structure and infiltration, and thus reduces runoff.  Soil organic matter contributes to nutrient and water holding capacities.  Regular inputs of organic material foster a diverse microbial community that supports plant health and productivity.

Benchmark SCI: _____

Planned / Attained SCI: _____

**Documentation Requirement:**  Attached copy of calculated SCI from RUSLE 2.

**I certify that the information provided for running the SCI RUSLE2 is correct.**


**Name: _____**        **Date: _____**